## Lake Michigan Game Fish Life History



## **Brook Trout**

Common Name: Brook trout, Eastern brook trout, speckled trout, brookie, brook, coaster

Scientific Name: Salvelinus fontinalis

Length: 10-20 inches

Weight: 3/4-4 pounds

State Record: (9/2/44) 9 lbs. 15 oz., from Prairie River, Lincoln Co.

Identification: Brook trout are identified by having an elongated and compressed body, a squarish tail and wormlike markings on their back and head. Their color is dark green or brown on their back, lighter colored on their sides, and silvery to white on their belly. They have many light spots on their sides along with red spots surrounded by bluish halos. The lower fins are red with a characteristic white leading edge followed by a black border.

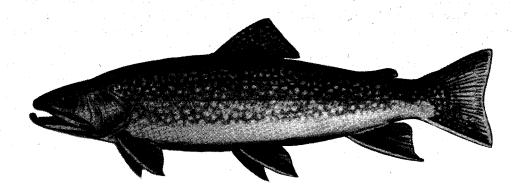
Distribution: Native to northeastern North America from the east coast to Minnesota north to Hudson Bay and the North Atlantic Ocean. These trout have been introduced into many parts of western North America, South America (including the Falkland Islands), New Zealand, Asia, and many parts of Europe. Brook trout are found along the Lake Michigan shoreline from Sheboygan north.

Lake Michigan Sport Catch in Wisconsin: 5,000-11,000 per year

Preferred Temperature Range: 53-57°F: 12-14°C

Predators: Adults: Sea lamprey, humans

Juveniles: Larger carnivorous fish, mergansers





Many trout species can be found in Wisconsin waters, but the brook trout is the only stream trout native to this area. Brook trout, however, are not restricted to living in streams and can frequently be found in lakes. At one time this beautiful gamefish was quite common to the bays and estuaries of Lake Michigan, and while in the lake, was called a "coaster". Through loss of habitat, pollution, sea lamprey predation, and overfishing, the coasters disappeared from many shores of the Great Lakes. Since 1967, a stocking program has been under way and now about 200,000 brook trout are stocked each year into the Lake Michigan waters of Wisconsin.

The life of the Lake Michigan coaster of today begins at the St. Croix State Fish Hatchery. Brook trout brood stock are spawned in October in a carefully executed spawning program. Fertilized eggs are shipped to Brule River, Bayfield, and Kettle Moraine State Fish Hatcheries for incubation. The eggs hatch in about 75 days in 48°F waters. The young brook trout are raised in the hatchery and planted in Lake Michigan either the following autumn as fingerlings or held until the next spring and planted as yearlings.

Brook trout are also used in the Wisconsin splake stocking program. Male brook trout are crossed with female lake trout from the Apostle Islands to produce a fertile hybrid known as a splake. At the present time splake are experimentally planted in Green Bay. Brook trout can also be crossed with brown trout to produce what is called a "tiger trout". Tiger trout were stocked in Lake Michigan from 1974 through 1977 but this stocking program was discontinued due to high mortality of the hatchery offspring.

Once in Lake Michigan, the brook trout feast on a diet of insects, crayfish, leeches, and small fish. Within 2 to 3 years they usually weigh 1 to 2 pounds. Brook trout mature at about three years of age and spawn in streams or rarely along shoreline areas adjacent to stocking locations. During the spawning season, the male develops vivid colors and a hooked lower jaw known as a "kype". After spawning, they return to the lake. Brook trout may repeat the spawning each year thereafter during a maximum 5 to 6 year lifespan. Little successful natural reproduction occurs in Lake Michigan because tributary streams are too warm in the summer to rear juveniles. Thus, brook trout are stocked annually to maintain the fishery.

Brook trout are caught from piers and rocky shores in the spring and summer. Stream fishing for brook trout occurs from Sheboygan north in the spring and autumn. Trolling also occasionally produces catches of brook trout during the spring and summer from Sheboygan north to Bailey's Harbor. Ice fishing in bays and especially in river mouths is popular during the winter months, making the brook trout a fish for all seasons. Some of the better ice fishing locations include the harbor areas of Sheboygan and Manitowoc. Favorite baits for all types of fishing are artificial flies, small spoons, spinners, nightcrawlers, and spawn.

The Lake Michigan brook trout stocking program is funded by Great Lakes fishermen through their purchase of fishing licenses and the Great Lakes Salmon and Trout Stamp. Future plans call for stocking nearly a quarter million brook trout each year in the Wisconsin waters of Lake Michigan. Attempts are currently being made to obtain and introduce additional wild strains of brook trout to help infuse added strength and vigor into the stocked fish and reestablish the "coaster" in Lake Michigan.